Gerard W Canters

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6461255/publications.pdf

Version: 2024-02-01

124 papers	6,264 citations	47006 47 h-index	74163 75 g-index
127 all docs	127 docs citations	127 times ranked	3550 citing authors

#	Article	IF	Citations
1	Single electron transfer events and dynamical heterogeneity in the small protein azurin from Pseudomonas aeruginosa. Chemical Science, 2020, 11, 763-771.	7.4	18
2	Chemical Exchange at the Trinuclear Copper Center of Small Laccase from Streptomyces coelicolor. Biophysical Journal, 2020, 119, 9-14.	0.5	17
3	Fluorescence Correlation Spectroscopy of Labeled Azurin Reveals Photoinduced Electron Transfer between Label and Cu Center. Chemistry - A European Journal, 2018, 24, 646-654.	3.3	3
4	Tracking Electrons in Biological Macromolecules: From Ensemble to Single Molecule. Molecules, 2014, 19, 11660-11678.	3.8	7
5	One at a Time: Intramolecular Electron-Transfer Kinetics in Small Laccase Observed during Turnover. Journal of the American Chemical Society, 2014, 136, 2707-2710.	13.7	17
6	Biâ€Enzyme Sensor for Phenolic Compounds with Fluorescent Readâ€Out. Chemistry - A European Journal, 2013, 19, 14977-14982.	3.3	4
7	Probing redox proteins on a gold surface by single molecule fluorescence spectroscopy. Journal of Chemical Physics, 2012, 136, 235101.	3.0	10
8	Top-Down FTICR MS for the Identification of Fluorescent Labeling Efficiency and Specificity of the Cu-Protein Azurin. Analytical Chemistry, 2012, 84, 2512-2520.	6.5	9
9	Involvement of Tyr108 in the Enzyme Mechanism of the Small Laccase from Streptomyces coelicolor. Journal of the American Chemical Society, 2012, 134, 18213-18216.	13.7	49
10	Channeling of electrons within SLAC, the small laccase from Streptomyces coelicolor. Faraday Discussions, 2011, 148, 161-171.	3.2	11
11	Probing the reactivity of different forms of azurin by flavin photoreduction. FEBS Journal, 2011, 278, 1506-1521.	4.7	6
12	Fluorescence Lifetime Analysis of Nitrite Reductase from Alcaligenesâ€...xylosoxidans at the Singleâ€Molecule Level Reveals the Enzyme Mechanism. Chemistry - A European Journal, 2011, 17, 12015-12019.	3.3	22
13	Fluorescent Cyclic Voltammetry of Immobilized Azurin: Direct Observation of Thermodynamic and Kinetic Heterogeneity. Angewandte Chemie - International Edition, 2010, 49, 5776-5779.	13.8	74
14	A FRET-based biosensor for NO detection. Journal of Inorganic Biochemistry, 2010, 104, 619-624.	3.5	24
15	2-Deoxystreptamine Conjugates by Truncationâ€“Derivatization of Neomycin. Pharmaceuticals, 2010, 3, 679-701.	3.8	3
16	Large Amplitude Conductance Gating in a Wired Redox Molecule. Journal of Physical Chemistry Letters, 2010, 1, 1541-1546.	4.6	16
17	Flavodoxin Relaxes in Microseconds Upon Excitation of the Flavin Chromophore: Detection of a UVâ€“Visible Silent Intermediate by Laser Photocalorimetry. Photochemistry and Photobiology, 2009, 85, 107-110.	2.5	0
18	Identification of a Radical Intermediate in the Enzymatic Reduction of Oxygen by a Small Laccase. Journal of the American Chemical Society, 2009, 131, 11680-11682.	13.7	32

#	Article	IF	Citations
19	Siteâ^'Site Interactions Enhances Intramolecular Electron Transfer in Streptomyces coelicolor laccase. Journal of the American Chemical Society, 2009, 131, 18226-18227.	13.7	27
20	Type-3 copper proteins as biocompatible and reusable oxygen sensors. Inorganica Chimica Acta, 2008, 361, 1116-1121.	2.4	15
21	The enzyme mechanism of nitrite reductase studied at single-molecule level. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 3250-3255.	7.1	70
22	Protein Film Voltammetry of Copper-Containing Nitrite Reductase Reveals Reversible Inactivation. Journal of the American Chemical Society, 2007, 129, 8557-8565.	13.7	45
23	Effect of the Methionine Ligand on the Reorganization Energy of the Type-1 Copper Site of Nitrite Reductase. Journal of the American Chemical Society, 2007, 129, 519-525.	13.7	25
24	Tryptophan-to-Dye Fluorescence Energy Transfer Applied to Oxygen Sensing by Using Type-3 Copper Proteins. Chemistry - A European Journal, 2007, 13, 7085-7090.	3.3	25
25	Inter- and Intramolecular Electron Transfer in Modified Azurin Dimers. European Journal of Inorganic Chemistry, 2007, 2007, 2627-2634.	2.0	1
26	Spectroscopic Characterization of a High-Potential Lipo-Cupredoxin Found in Streptomyces coelicolor. Journal of the American Chemical Society, 2006, 128, 14579-14589.	13.7	15
27	A Rearranging Ligand Enables Allosteric Control of Catalytic Activity in Copper-containing Nitrite Reductase. Journal of Molecular Biology, 2006, 358, 1081-1093.	4.2	12
28	A FÃ¶rster-resonance-energy transfer-based method for fluorescence detection of the protein redox state. Analytical Biochemistry, 2006, 350, 52-60.	2.4	42
29	Paramagnetic Properties of the Halide-Bound Derivatives of Oxidised Tyrosinase Investigated by1H NMR Spectroscopy. Chemistry - A European Journal, 2006, 12, 7668-7675.	3.3	12
30	Click Chemistry with an Active Site Variant of Azurin. European Journal of Inorganic Chemistry, 2006, 2006, 3861-3868.	2.0	8
31	Spin-Density Distribution in the Copper Site of Azurin. ChemPhysChem, 2006, 7, 1286-1293.	2.1	13
32	A Random-sequential Mechanism for Nitrite Binding and Active Site Reduction in Copper-containing Nitrite Reductase*. Journal of Biological Chemistry, 2006, 281, 16340-16346.	3.4	72
33	A crystallographic study of Cys69Ala flavodoxin II fromAzotobacter vinelandii: Structural determinants of redox potential. Protein Science, 2005, 14, 2284-2295.	7.6	48
34	The effect of replacing the axial methionine ligand with a lysine residue in cytochromeâ€ƒc-550 from Paracoccus versutus assessed by X-ray crystallography and unfolding. FEBS Journal, 2005, 272, 2441-2455.	4.7	13
35	The Oxidation State of a Protein Observed Molecule-by-Molecule. ChemPhysChem, 2005, 6, 1381-1386.	2.1	13
36	Calculation of the Redox Potential of the Protein Azurin and Some Mutants. ChemBioChem, 2005, 6, 738-746.	2.6	49

#	Article	IF	Citations
37	The Effects of Ligand Exchange and Mobility on the Peroxidase Activity of a Bacterial Cytochrome c upon Unfolding. ChemBioChem, 2005, 6, 747-758.	2.6	5
38	Sensitive detection of the redox state of copper proteins using fluorescence. Journal of Biological Inorganic Chemistry, 2005, 10, 683-687.	2.6	20
39	Ligand Loop Effects on the Free Energy Change of Redox and pH-Dependent Equilibria in Cupredoxins Probed on Amicyanin Variants. Biochemistry, 2005, 44, 9944-9949.	2.5	24
40	Interaction between the Type-3 Copper Protein Tyrosinase and the Substrate Analoguep-Nitrophenol Studied by NMR. Journal of the American Chemical Society, 2005, 127, 567-575.	13.7	39
41	Stopped-flow Fluorescence Studies of Inhibitor Binding to Tyrosinase from Streptomyces antibioticus. Journal of Biological Chemistry, 2004, 279, 13425-13434.	3.4	26
42	What are the structural features of the active site that define binuclear copper proteins function?. Micron, 2004, 35, 143-145.	2.2	4
43	Bidirectional Catalysis by Copper-Containing Nitrite Reductaseâ€. Biochemistry, 2004, 43, 10467-10474.	2.5	59
44	Characterization of SLAC: A small laccase fromStreptomyces coelicolorwith unprecedented activity. Protein Science, 2004, 13, 2388-2397.	7.6	198
45	Simulation of the Substrate Cavity Dynamics of Quercetinase. Journal of Molecular Biology, 2004, 344, 725-738.	4.2	11
46	Messung eines Cu-Cu-Abstands von 26 Ã... mit einer gepulsten EPR-Methode. Angewandte Chemie, 2003, 115, 64-67.	2.0	13
47	Measurement of a Cuï£¿Cu Distance of 26Ã... by a Pulsed EPR Method. Angewandte Chemie - International Edition, 2003, 42, 62-64.	13.8	83
48	Reconstitution of the Type-1 Active Site of the H145G/A Variants of Nitrite Reductase by Ligand Insertionâ€. Biochemistry, 2003, 42, 4075-4083.	2.5	37
49	Control of Metalloprotein Reduction Potential:Â Compensation Phenomena in the Reduction Thermodynamics of Blue Copper Proteinsâ€. Biochemistry, 2003, 42, 9214-9220.	2.5	58
50	Spectroscopic Characterization of the Electronic Changes in the Active Site of Streptomyces antibioticus Tyrosinase upon Binding of Transition State Analogue Inhibitors. Journal of Biological Chemistry, 2003, 278, 7381-7389.	3.4	34
51	A New Type 2 Copper Cysteinate Azurin. Journal of Biological Chemistry, 2002, 277, 44121-44130.	3.4	19
52	Structural Basis and Mechanism of the Inhibition of the Type-3 Copper Protein Tyrosinase from Streptomyces antibioticusby Halide Ions. Journal of Biological Chemistry, 2002, 277, 30436-30444.	3.4	43
53	Tyrosinase-catalyzed Oxidation of Fluorophenols. Journal of Biological Chemistry, 2002, 277, 44606-44612.	3.4	71
54	Thermodynamics of the Acid Transition in Blue Copper Proteinsâ€. Biochemistry, 2002, 41, 14293-14298.	2.5	32

#	Article	IF	Citations
55	Peroxidase Activity as a Tool for Studying the Folding of c-Type Cytochromes. Biochemistry, 2002, 41, 13067-13077.	2.5	106
56	Effect of the Protein Matrix of Cytochromec in Suppressing the Inherent Peroxidase Activity of Its Heme Prosthetic Group. ChemBioChem, 2002, 3, 110-112.	2.6	32
57	The pH-dependent redox inactivation of amicyanin from Paracoccus versutus as studied by rapid protein-film voltammetry. Journal of Biological Inorganic Chemistry, 2002, 7, 94-100.	2.6	12
58	Dramatic modulation of electron transfer in protein complexes by crosslinking. Nature Structural Biology, 2002, 9, 48-52.	9.7	81
59	Anti-cooperativity in the two electron oxidation of the S118C disulfide dimer of azurin. Inorganica Chimica Acta, 2002, 331, 296-302.	2.4	12
60	Interaction of Yeast Iso-1-cytochromecwith CytochromecPeroxidase Investigated by [15N,1H] Heteronuclear NMR Spectroscopyâ€. Biochemistry, 2001, 40, 7069-7076.	2.5	79
61	Enthalpic and Entropic Contributions to the Mutational Changes in the Reduction Potential of Azurinâ€. Biochemistry, 2001, 40, 6707-6712.	2.5	38
62	Expression, purification and characterization of the soluble CuA domain of cytochrome c oxidase ofParacoccus versutus. Science Bulletin, 2001, 46, 1608-1611.	1.7	0
63	The peroxidase activity of cytochromec-550 fromParacoccus versutus. FEBS Journal, 2001, 268, 4207-4216.	0.2	62
64	Effects of Dimerization on Protein Electron Transfer. Chemistry - A European Journal, 2001, 7, 2398-2406.	3.3	28
65	Determination of phenolic compounds using recombinant tyrosinase from Streptomyces antibioticus. Analytica Chimica Acta, 2001, 427, 201-210.	5.4	35
66	Role of ligand substitution on long-range electron transfer in azurins. FEBS Journal, 2000, 267, 3123-3129.	0.2	17
67	Kinetic and paramagnetic NMR investigations of the inhibition of Streptomyces antibioticus tyrosinase. Journal of Molecular Catalysis B: Enzymatic, 2000, 8, 27-35.	1.8	46
68	The structural role of the copper-coordinating and surface-exposed histidine residue in the blue copper protein azurin 1 1Edited by R. Huber. Journal of Molecular Biology, 2000, 299, 737-755.	4.2	37
69	EPR study of the dinuclear active copper site of tyrosinase from Streptomyces antibioticus. FEBS Letters, 2000, 474, 228-232.	2.8	40
70	Loop-Directed Mutagenesis of the Blue Copper Protein Amicyanin fromParacoccus versutusand Its Effect on the Structure and the Activity of the Type-1 Copper Site. Journal of the American Chemical Society, 2000, 122, 204-211.	13.7	83
71	The Met99Gln Mutant of Amicyanin fromParacoccusversutusâ€. Biochemistry, 2000, 39, 9551-9560.	2.5	46
72	Role of the Surface-Exposed and Copper-Coordinating Histidine in Blue Copper Proteins:Â The Electron-Transfer and Redox-Coupled Ligand Binding Properties of His117Gly Azurin. Journal of the American Chemical Society, 2000, 122, 12186-12194.	13.7	71

#	Article	IF	Citations
73	The effect of pH and ligand exchange on the redox properties of blue copper proteins. Faraday Discussions, 2000, 116, 205-220.	3.2	40
74	Electrostatic effects on the kinetics of photoinduced electron-transfer reactions of the triplet state of zinc cytochrome c with wild-type and mutant forms of Pseudomonas aeruginosa azurin. Journal of Biological Inorganic Chemistry, 1999, 4, 111-121.	2.6	15
75	Paramagnetic NMR investigations of Co(II) and Ni(II) amicyanin. Journal of Biological Inorganic Chemistry, 1999, 4, 457-467.	2.6	34
76	Paramagnetic NMR studies of blue and purple copper proteins. , 1999, 5, S19-S32.		40
77	1 H NMR spectroscopy of the binuclear Cu(II) active site of Streptomyces antibioticus tyrosinase. FEBS Letters, 1999, 442, 215-220.	2.8	64
78	Investigation of the Electronic Structure of 2Feâ^'2S Model Complexes and the Rieske Protein Using Ligand K-Edge X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 1999, 121, 2353-2363.	13.7	59
79	Backbone Dynamics of Azurin in Solution:Â Slow Conformational Change Associated with Deprotonation of Histidine 35â€. Biochemistry, 1999, 38, 12690-12697.	2.5	41
80	1H, 15N and 13C chemical shift assignment of the guanine nucleotide exchange domain of human Elongation Factor-one beta. Journal of Biomolecular NMR, 1998, 12, 467-468.	2.8	1
81	pH dependence of the enantioselective excited-state quenching of Î›,Î”-Tb(III) and Î›,Î”-Eu(III)tris(pyridine-2,6-dicarboxylate) chelates by ferricytochrome c from horse heart and ferricytochrome c-550 from Paracoccus versutus. Journal of Biological Inorganic Chemistry, 1998, 3, 463-469.	2.6	13
82	Type I blue copper proteins as enantioselective quenchers of the photoluminescence of Î”,Î›-Eu(pyridine-2,6-dicarboxylate)3 3â€“: azurin from Pseudomonas aeruginosa and its Met44â†'Lys mutant, amicyanin from Paracoccus versutus and parsley plastocyanin. Journal of Biological Inorganic Chemistry, 1998, 3, 663-670.	2.6	8
83	Spectroscopic and Geometric Variations in Perturbed Blue Copper Centers:Â Electronic Structures of Stellacyanin and Cucumber Basic Protein. Journal of the American Chemical Society, 1998, 120, 9621-9631.	13.7	140
84	Spectroscopy of Mixed-Valence CuA-Type Centers:Â Ligand-Field Control of Ground-State Properties Related to Electron Transfer. Journal of the American Chemical Society, 1998, 120, 5246-5263.	13.7	192
85	Understanding the Electronic Properties of the CuASite from the Soluble Domain of CytochromecOxidase through Paramagnetic1H NMRâ€. Biochemistry, 1998, 37, 7378-7389.	2.5	63
86	In vivo studies disprove an obligatory role of azurin in denitrification in Pseudomonas aeruginosa and show that azu expression is under control of RpoS and ANR. Microbiology (United Kingdom), 1997, 143, 2853-2863.	1.8	126
87	A1H NMR Study of the Paramagnetic Active Site of the CuAVariant of Amicyaninâ€. Biochemistry, 1997, 36, 3262-3269.	2.5	47
88	Crystal structures of modified apo-His117Gly and apo-His46Gly mutants of Pseudomonas aeruginosa azurin a aEdited by I. A. Wilson. Journal of Molecular Biology, 1997, 266, 357-365.	4.2	22
89	Electron-Transfer Properties of Pseudomonas Aeruginosa [Lys44, Glu64]azurin. FEBS Journal, 1997, 247, 322-331.	0.2	20
90	Selective observation of the Cu(I)-amicyanin metal site by paramagnetic NMR on partially oxidised samples. Journal of Biomolecular NMR, 1997, 9, 299-305.	2.8	10

#	Article	IF	Citations
91	Spectroscopic and Mechanistic Studies of Type-1 and Type-2 Copper Sites in Pseudomonas aeruginosa Azurin As Obtained by Addition of External Ligands to Mutant His46Gly. Biochemistry, 1996, 35, 1397-1407.	2.5	60
92	Dimerization of a His117Gly Azurin Mutant by External Addition of 1,Ï‰-Di(imidazol-1-yl)alkanes. Biochemistry, 1996, 35, 13205-13211.	2.5	10
93	The role of His117 in the redox reactions of azurin from Pseudomonas aeruginosa. FEBS Letters, 1996, 381, 140-142.	2.8	22
94	1H NMR studies of the paramagnetic CuAcenter of cytochrome oxidase. FEBS Letters, 1996, 394, 340-344.	2.8	33
95	Analysis of the Paramagnetic Copper(II) Site of Amicyanin by1H NMR Spectroscopyâ€. Biochemistry, 1996, 35, 3085-3092.	2.5	77
96	Loop-Directed Mutagenesis Converts Amicyanin fromThiobacillus versutusinto a Novel Blue Copper Protein. Journal of the American Chemical Society, 1996, 118, 7406-7407.	13.7	57
97	The Mutation Met121His Creates a Type-1.5 Copper Site in Alcaligenes denitrificans Azurin. FEBS Journal, 1996, 240, 342-351.	0.2	48
98	Structure-function correlation of intramolecular electron transfer in wild type and single-site mutated azurins. Chemical Physics, 1996, 204, 271-277.	1.9	51
99	NMR assignments and relaxation studies of Thiobacillus versutus ferrocytochrome câ€550 indicate the presence of a highly mobile 13â€residues long Câ€terminal tail. Protein Science, 1996, 5, 2494-2505.	7.6	16
100	The Cu_A site of cytochrome c oxidase. Recueil Des Travaux Chimiques Des Pays-Bas, 1996, 115, 345-351.	0.0	11
101	Engineered Cupredoxins and Bacterial Cytochrome c Oxidases Have Similar CuA Sites: Evidence from Resonance Raman Spectroscopy. Journal of the American Chemical Society, 1995, 117, 10759-10760.	13.7	34
102	Introduction of a CuAsite into the blue copper protein amicyanin fromThiobacillus versutus. FEBS Letters, 1995, 365, 92-94.	2.8	90
103	Kinetics of the reduction of wild-type and mutant cytochromec-550 by methylamine dehydrogenase and amicyanin from Thiobacillus versutus. FEBS Journal, 1994, 222, 561-571.	0.2	25
104	The introduction of a negative charge into the hydrophobic patch of Pseudomonas aeruginosa azurin affects the electron self-exchange rate and the electrochemistry. FEBS Journal, 1994, 222, 583-588.	0.2	47
105	Solution Structure of the Type 1 Blue Copper Protein Amicyanin from Thiobacillus versutus. Journal of Molecular Biology, 1994, 240, 358-371.	4.2	48
106	Crystal structure analysis and refinement at 2Â·15Ã... resolution of amicyanin, a type I blue copper protein, from Thiobacillus versutus. Journal of Molecular Biology, 1994, 236, 1196-1211.	4.2	83
107	Characterization of Mutant Met100Lys of Cytochrome c-550 from Thiobacillus versutus with Lysine-Histidine Heme Ligation. Biochemistry, 1994, 33, 10051-10059.	2.5	61
108	Effect of lysine ionization on the structure and electrochemical behaviour of the Met44Lys mutant of the blue-copper protein azurin from Pseudomonas aeruginosa. FEBS Journal, 1993, 218, 229-238.	0.2	52

#	Article	IF	Citations
109	X-ray Analysis and Spectroscopic Characterization of M121Q Azurin. Journal of Molecular Biology, 1993, 229, 1007-1021.	4.2	186
110	Resonance Raman spectroscopy of the azurin His117Gly mutant. Interconversion of type 1 and type 2 copper sites through exogenous ligands. Biochemistry, 1993, 32, 12455-12464.	2.5	74
111	Creation of type-1 and type-2 copper sites by addition of exogenous ligands to the Pseudomonas aeruginosa azurin His117Gly mutant. Journal of the American Chemical Society, 1993, 115, 1121-1129.	13.7	124
112	Mutagenesis of the conserved lysine 14 of cytochrome c-550 from Thiobacillus versutus affects the protein structure and the electron self-exchange rate. Biochemistry, 1993, 32, 13893-13901.	2.5	28
113	Complete sequential proton and nitrogen-15 nuclear magnetic resonance assignments and solution secondary structure of the blue copper protein azurin from Pseudomonas aeruginosa. Biochemistry, 1992, 31, 10194-10207.	2.5	65
114	Crystal structure ofPseudomonas aeruginosaapo-azurin at 1.85 Ã... resolution. FEBS Letters, 1992, 306, 119-124.	2.8	122
115	Characterization and crystal structure of zinc azurin, a by-product of heterologous expression in Escherichia coli of Pseudomonas aeruginosa copper azurin. FEBS Journal, 1992, 205, 1123-1129.	0.2	126
116	The effect of driving force on intramolecular electron transfer in proteins. Studies on single-site mutated azurins. FEBS Journal, 1992, 210, 399-403.	0.2	48
117	Type I and II copper sites obtained by external addition of ligands to a His117Gly azurin mutant. Journal of the American Chemical Society, 1991, 113, 5050-5052.	13.7	84
118	Crystal structure analysis of oxidized Pseudomonas aeruginosa azurin at pH 5Â·5 and pH 9Â·0. Journal of Molecular Biology, 1991, 221, 765-772.	4.2	571
119	X-ray crystal structure of the two site-specific mutants His35Gln and His35Leu of azurin from Pseudomonas aeruginosa. Journal of Molecular Biology, 1991, 218, 427-447.	4.2	170
120	Isolation and characterization of cytochrome c550 from the methylamine-oxidizing electron-transport chain of Thiobacillus versutus. FEBS Journal, 1990, 192, 653-661.	0.2	32
121	Involvement of the hydrophobic patch of azurin in the electron-transfer reactions with cytochrome c551 and nitrite reductase. FEBS Journal, 1990, 194, 109-118.	0.2	160
122	Site-directed mutagenesis reveals that the hydrophobic patch of azurin mediates electron transfer. Journal of the American Chemical Society, 1990, 112, 907-908.	13.7	115
123	Purification and characterization of a non-reconstitutable azurin, obtained by heterologous expression of the Pseudomonas aeruginosa azu gene in Escherichia coli. Biochimica Et Biophysica Acta - Bioenergetics, 1990, 1019, 283-292.	1.0	99
124	The pH dependence of the electron self-exchange rate of azurin from Pseudomonas aeruginosa as studied by 1H-NMR. FEBS Journal, 1985, 153, 559-564.	0.2	50